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(71) Applicant (for all designated States except US):  
**SAMSHIN CREATION CO., LTD.** [KR/KR]; 31-28  
Cheongdam2-dong, Gangnam-gu, Seoul 135-950 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHUN, Suk-Won**  
[KR/KR]; 106-307 Saetbyeolmaeul Life Apt., Bun-  
dang-dong, Bundang-gu, Seongnam-si, Gyonggi-do  
463-748 (KR). **PARK, Jong-Su** [KR/KR]; 108-1303  
Hansin Apt., Cheongnyangni 1-dong, Dongdaemun-gu,

Seoul 130-775 (KR). **JO, Seong-Mu** [KR/KR]; 201-308  
Anam Apt., Myeongnyun-dong 2-ga, Jongno-gu, Seoul  
110-767 (KR). **LEE, Hwa-Seop** [KR/KR]; 103-601  
Samsung Cheongdam Gongwon Apt., Cheongdam-dong,  
Gangnam-gu, Seoul 135-952 (KR).

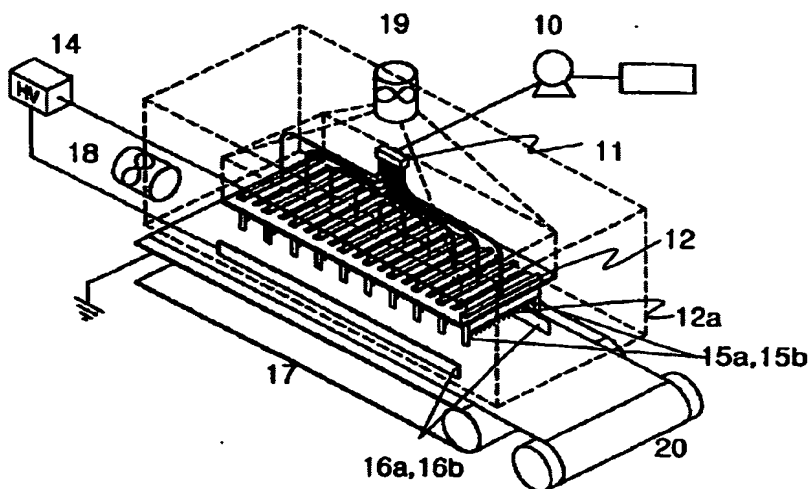
(74) Agents: **LEE, Sang-Yong et al.**; 4F., Byukcheon Bldg.,  
1597-5 Seocho-dong, Seocho-gu, Seoul 137-876 (KR).

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(54) Title: A COMPLEX MEMBRANE FOR ELECTROCHEMICAL DEVICE, MANUFACTURING METHOD AND ELECTROCHEMICAL DEVICE HAVING THE SAME



(57) Abstract: A complex membrane for an electrochemical device such as a lithium secondary battery, its manufacturing method, and an electrochemical device having the complex membrane are disclosed. The complex membrane includes a micro-porous polyolefin membrane, and a web-phase porous membrane united to at least one side of the micro-porous polyolefin membrane and composed of nano-fibers. Since the complex membrane is capable of absorbing an electrolyte uniformly, it greatly improves performance of a battery when being used for an electrochemical device. In addition, owing to excellent mechanical strength and good binding capacity to an electrode, it helps to increase a process rate for manufacturing the battery.

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